REMARKS

In the Official Action, the Examiner rejected claims 1-30. Claim 6 has been amended to correct a minor typographical error. Claims 12 and 16 have been amended to set forth the recited subject matter more clearly. Applicant respectfully requests reconsideration of the application in view of the remarks set forth below. Applicant believes that all pending claims are in condition for allowance.

Rejections Under 35 U.S.C. § 112

The Examiner rejected claim 16 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant has amended claim 16 and respectfully submits that the amended claim fully complies with 35 U.S.C. §112.

Specifically, the Examiner asserted that "it is not clear what if any structural limitation is being claimed" in claim 16 by the language "as ordered by the first logic device." Official Action, page 2, paragraph 3. Applicant has amended claim 16, line 5 to change the phrase "as ordered by the first logic device" to "from the first logic device." This amendment is fully supported by the specification and does not alter the scope of the claims. Since the Examiner did not reject the use of the phrase "from the first logic device" in claim 18, Applicant believes that this amendment is sufficient to overcome the Examiner's rejections. Accordingly, Applicant respectfully requests withdrawal of the Examiner's rejection under 36 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-15, 20-23, and 25-30 under 35 U.S.C. § 102(e) as being anticipated by Kelly (U.S. Patent No. 5,996,036).

A *prima facie* case of anticipation under 35 U.S.C. § 102 requires a showing that each limitation of a claim is found in a single reference, practice or device. *In re Donohue*, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985). Anticipation under 35 U.S.C. § 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under 35 U.S.C. § 102, a single reference must teach each and every element or step of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Thus, if the claims recite even one element not found in the cited reference, the reference does not anticipate the claimed invention.

As discussed further below, Applicant respectfully submits that the Kelly reference does not disclose all of the recited features of claims 1-15, 20-23, and 25-30 and therefore, respectfully requests withdrawal of the Examiner's rejections under 35 U.S. C. § 102(e).

Claims 1, 6, 9, and 25

With regard to claims 1, 6, 9, and 25, the Examiner stated:

> Kelly discloses methods and system means for temporarily storing transaction entries (e.g., col. 9, lines 30-36); selecting one of the plurality of temporarily stored entries and enqueuing the selected one (e.g., col. 9, lines 44-46).

Independent claim 1 recites a method of storing transaction entries in a transaction order queue, comprising the acts of "temporarily storing a plurality of transaction entries," "selecting one of the plurality of temporarily stored transaction entires," and "enqueuing the selected one of the plurality of the temporarily stored transaction entries in the transaction order queue." (emphasis added). Independent claims 6, 9 and 25 recite subject matter having similar limitations. Based on the similarity in claimed subject matter and the grouping of the claims in the Office Action, claims 1, 6, 9 and 25 are addressed together below.

As a preliminary matter, it should be noted that the Examiner's rejection lacks specificity. While certain brief passages of the Kelly reference were cited, the Examiner failed to indicate what elements from the Kelly reference are being asserted against the presently recited subject matter. Accordingly, Applicant has made a number of presumptions regarding the passages cited by the Examiner. If the Examiner chooses to maintain this rejection, Applicant respectfully reminds the Examiner of his duties and obligations under 37 C.F.R. § 1.104 and MPEP § 707.07 and requests that the Examiner clarify the rejection and specifically cite the presently recited features in a future non-final Office Action.

In the rejection, the only passages cited by the Examiner with regard to independent claims 1, 6, 9 and 25 are col. 9, lines 30-36 and col. 9, lines 44-46. The cited passages state:

> Referring now to FIG. 6, the arbiter 600 will be described in greater detail. The arbiter 600 includes master queues 601, one for each master in the system, and slave queues 602, one for each slave in the system. Each of the master queues 601 are connected at their respective data inputs to a SACK vector composed of the slave acknowledge signals SACK of each of the slaves, in addition to a Rd/Wr signal.
>
> * * *
>
> The bus grant signals BG are produced by an address bus arbiter state machine 605 in response to the bus request signals BR of each of the masters.

Applicants note that figure 6 of the Kelly reference illustrates an arbiter having queues 601 and 602. The only other element discussed in the passages cited by the Examiner is the address bus arbiter state machine 605. Applicants fail to see any reasonable connection between the cited passages and the recited subject matter. Though not explicitly stated, it would appear that the Examiner is asserting that the queues 601 and 602 of the arbiter 600 provide the device/means for "temporarily storing a plurality of transaction entries," as recited in the present claims. Assuming this to be an accurate characterization of the Examiner's assertion, Applicant respectfully traverses that the cited passage or any other portion of the Kelly reference further discloses "selecting one of the plurality of temporarily stored transaction entries" and "enqueuing the selected one of the plurality of temporarily stored transaction entries *in the transaction order queue*," as recited in claim 1. (Emphasis added)

In the Official Action, the Examiner cited column 9, lines 44-46 of the Kelly reference as disclosing "enqueuing the selected one," as recited in claim 1. Office Action, page 3, lines 1-2. Applicant respectfully traverses this assertion and respectfully submits that the cited passage does not disclose the recited feature. Column 9, lines 44-46 of the Kelly reference state that "bus grant signals are produced by an address bus arbiter state machine 605 in response to the bus request signals BR of each of the masters." There is nothing in the cited reference that can be accurately correlated with the transaction order queue of claim 1, much less enqueuing entries in the transaction order queue," as recited in claim 1. On the contrary, lines 44-46 of Kelly disclose granting access *to a data bus*. The data bus is clearly not a queue, much less the transaction order queue recited in claim 1. For this reason, the Kelly reference cannot possibly disclose "*enqueuing* the selected one of the plurality of the temporarily stored transaction entries *in the transaction order queue*," as recited by claim 1. (Emphasis added) For at least this reason, the Kelly reference does not disclose each of the elements recited in claim 1.

In the alternative, if the Examiner is asserting that the queues 601 and 602 can be accurately correlated with the transaction order queue, Applicant submits that even if this assertion were plausible, the reference fails to disclose "temporarily storing a plurality of transaction entries," as recited in claim 1. As discussed further above, claim 1 further recites selecting one of the temporarily stored transaction entries and enqueuing the selected entry in the transaction order queue. If the queues 601 and 602 are indeed being correlated with the presently recited transaction order queue, it is clear that the Kelly reference does not disclose enqueuing the queues 601 and 602 with transaction entries after temporarily storing the entries. Accordingly, even under this alternative interpretation of the vague rejection, the Kelly reference does not disclose each of the elements recited in claim 1.

The Examiner rejected independent claims 6, 9, and 25 in conjunction with claim 1 and provided no further support for the rejection of the additional claims. Among other unique features, claim 6 recites "providing a transaction order queue to receive the selected one of the plurality of temporarily stored transaction entries." Similarly, claim 9 recites "means for enqueuing the selected one of the plurality of temporarily stored transaction entries in a transaction order queue." Claim 25 recites "delivering the plurality of transaction entries to a transaction order queue one at a time." For the reasons discussed above with regard to claim 1, Applicant respectfully submits that the Kelly reference fails to disclose enqueuing (or delivering entries to) a transaction order queue, as recited in claims 6, 9 and 25. Accordingly, the Kelly reference does not disclose each of the features recited in these claims.

In view of the discussion above, Applicant submits that the Kelly reference fails to anticipate the recited subject matter and respectfully requests withdrawal of the Examiner's rejection and allowance of claim 1, 6, 9, and 25 as well as their respective dependant claims 2-5, 7, 8, 10, 11, 26, 27. If the Examiner chooses to maintain this rejection, Applicant

respectfully requests that the Examiner clarify the rejection and specifically cite the particular features of Kelly relied on as anticipating the presently recited features of the claims 1, 6, 9 and 25, in a future non-final Office Action.

Claims 12, 22, and 28

Independent claim 12, as amended, recites "logic adapted for selecting and ordering the plurality of transaction entries in the transaction order queue." Independent claim 22 recites "a transaction order queue circuit configured to process transactions from the memory device, the transaction order queue circuit being adapted to encode a plurality of simultaneous transaction entries." Independent claim 28 recites "transmitting the stored transaction entries to the transaction order queue according to priority." The Examiner cited the same ten lines of the Kelly reference (i.e., col. 9, lines 30-36 and 46-48) in asserting that the reference anticipates claims 12, 22 and 28. For reasons very similar to those discussed above with regard to claims 1, 6, 9, and 25, independent claims 12, 22, and 28 are also clearly not anticipated by the Kelly reference. Since the Kelly reference does not disclose a transaction order queue, it cannot disclose "logic adapted for selecting and ordering the plurality of transaction entries in the transaction order queue," as recited in claim 12. Similarly, Kelly cannot disclose a "a transaction order queue circuit configured to process transactions from the memory device, the transaction order queue circuit being adapted to encode a plurality of simultaneous transaction entries," as recited in claim 22 or "transmitting the stored transaction entries to the transaction order queue according to priority," as recited in claim 28. For these reasons, Applicant submits that the Kelly reference fails to anticipate the recited subject matter and respectfully requests withdrawal of the Examiner's rejection of claims 12-15, 22-24, and 28-30. If the Examiner chooses to maintain this rejection, Applicant respectfully requests that the Examiner clarify the rejection and specifically cite the particular features of Kelly relied on as anticipating the presently recited features of the claims 12, 22 and 28, in a future non-final Office Action.

Rejections Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 16-19, and 24 under 35 U.S.C. § 103(a) as being unpatentable over Kelly in view of Shah (U.S. 2002/0083247). Applicant respectfully traverses this rejection.

For the reasons discussed above with regard to the rejections under 35 U.S.C. § 102 , it is clear that the Kelly reference does not disclose a transaction order queue having the limitations and features recited in claim 16. While Applicant respectfully asserts that the Shah reference fails to cure the deficiencies of the Kelly reference with regard to the transaction order queue, Applicant respectfully asserts that this point is irrelevant because the Shah reference is not valid prior art under 35 U.S.C. §103(a).

U.S. Patent Application 2002/0083247 was filed on December 26, 2000 on behalf of Paras A. Shah of Houston, TX. The present application was filed February 8, 2001 on behalf of the same inventor, Paras A. Shah of Houston, TX. Mr. Shah is the sole inventor on both applications. Since there is no statutory bar involved in this matter, under 35 U.S.C. §102 and §103, Mr. Shah's previous application is not valid prior art.

35 U.S.C §103(a) states that:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in he art to which said subject matter pertains."

The term "prior art" as used in section 103 refers "to the statutory material named in 35 U.S.C. §102," as well as "prior art created by admissions by the parties." *Riverwood International Corp. v. R.A. Jones & Co., Inc.*, 324 F.3d 1346, 1354; 66 U.S.P.Q.2d 1331,

1337 (Fed. Cir. 2003). Since a party admission is not at issue in this matter, the prior art under 103(a) is limited to the categories established under 35 U.S.C. §102. Since the Shah reference is a U.S. Patent Application filed less than 2 months prior to the filing of the present application with no prior public disclosure, 102(e) is the only possible statutory basis for the Examiner's rejection under 103.

However, while 35 U.S.C. §102(e) is a possible statutory basis for prior art in this situation, the Shah reference is in fact not a valid prior art reference under 102(e) because it fails to comply with the plain language of the statute. 102(e) provides that a person shall be entitled to a patent unless:

> (e) the invention was described in (1) an application for a patent, published under section 122(b), by another filed in the United States...or (2) a patent granted on an application for patent by another filed in the United States." (emphasis added)

The plain language of the statute makes it clear that *one's own work* is not a valid prior art reference under §102(e). Indeed, the Federal Circuit recently held that "an application issued to the same inventive entity cannot be prior art under 102(e)." *Riverwood*, 324 F.3d at 1355-56; 66 U.S.P.Q.2d at 1338; *see also* M.P.E.P. 715.01(c) ("Unless it is a statutory bar, a rejection based on a publication may be overcome by a showing that it was published either by applicant himself/herself or on his/her behalf.")

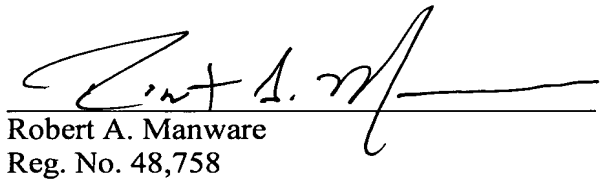
For the reasons stated above, Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. 103(a) rejections to claims 16-19. Further, since the same references were applied to claim 24, Applicant also requests the withdrawal of the 103(a) rejection against claim 24.

Conclusion

In view of the remarks and amendments set forth above, Applicant respectfully requests allowance of the pending claims 1-30. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: February 3, 2004



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